# Prevalence of Social Phobia among Medical Students in Saudi Arabia Adnan Khalifah Alkhalifah<sup>1</sup>, Najeeb Saleh Alsalameh<sup>2</sup>, Majed Ali Alhomaidhy, Nabiel abdulaziz alrwies <sup>4</sup>

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### **ABSTRACT**

**Background:** Social phobia is the second most common type of anxiety disorders. It is A persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be embarrassing and humiliating. The symptoms of social phobia including nausea, slurred speech and palpitations. It can negatively affect the activity of the person. Persons with social phobia have a negative effect on social relationships and impairments in work performance. Social phobia prevalence varies between different countries and cultures.

Aim: To estimate the prevalence of social phobia among medical students in Saudi Arabia.

**Methods:**This study was conducted by using SPIN structured questionnaire and it included 1447 of medical students from different educational years. The questionnaire involved 17 questions, the total score referred to the different severity of the disease that ranged from no disease to very severe.

**Results:** The female percent was 61.7% and male percent was 38.3%. Students from the  $7^{th}$  medical year represented the large majority of participants 25.4%. The mean score of social phobia was  $37.95 \pm 14.17$ . The prevalence of mild grade of social phobia was 29%, moderate represented 24.3%, sever grade represented 19.1% and very severe represented 19.8%, higher percent of females 20.3% suffered very sever social phobia than males (19%). There was a significant difference regarding different social phobia grades and the medical years of students (P-value=0.004).

**Conclusion:** There was a mild prevalence of social phobia between medical students with no significant difference between males and females regarding different grades of social phobia.

Keywords: Social phobia, Medical students, SAD in KSA.

### INTRODUCTION

Social phobia is also known as Social Anxiety Disorder (SAD) <sup>[1]</sup>, it is a type of anxiety and it is the second most common type of anxiety disorders <sup>[1]</sup>. It is A persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be embarrassing and humiliating, it can influence the daily activity of the individual <sup>[3]</sup>.

The somatic symptoms of social phobia including excessive sweating, slurred speech, palpitations, blushing, tremor and nausea <sup>[2]</sup>. Individuals who suffer social phobia have a significantly lower quality of life, negative impact on social relationships and impairments in work performance <sup>[5]</sup> also they have lower selfesteem than those who don't have social phobia <sup>[6]</sup>. Many of those who had this disorder may lose their educational and occupational opportunities and they may stay at home for long period of time <sup>[2]</sup>.

**Savari** found a significant negative correlation between social competence and social phobia <sup>[7]</sup>. Social phobia also was found to be associated with mood disorders disorder <sup>[9]</sup> and social isolation <sup>[10]</sup>. The risk of developing a major depressive disorder can be increased by social phobia <sup>[4]</sup>. The early diagnosis can reduce symptoms of this disease and decrease its adverse events as well as prevent its complications <sup>[2]</sup>.

The prevalence of social phobia varies between different countries and cultures <sup>[2]</sup>. Social phobia prevalence in western countries accounts for 7-13% <sup>[III]</sup> other percents were reported in other countries, it was reported to be relevant at a rate of 10 % in India <sup>[12]</sup> and 11.7% in Saudi Arabia <sup>[13]</sup>.

The prevalence of social phobia was evaluated between King Khalid University Medical Students and it was found to be 60 % [4]. A study from Malaysia on medical students showed that 56% of medical students had symptoms of social phobia [14]. Higher percent

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(85%) of prevalence of symptoms was found between medical students was reported by **Raboch** <sup>[15]</sup>. In a study by **Kjeldstadli** *et al.* <sup>[16]</sup>, prevalence of symptoms of social phobia was reported to be 22% among medical students.

It was reported that more males were diagnosed with social phobia than females [17]. Another study [4] confirmed the previous findings, where the mean score for social phobia symptoms was higher in males than in females. The present study aimed to estimate the prevalence of social phobia among medical students in Saudi Arabia.

### MATERIALS AND METHODS

## **Subjects**

This study is cross sectional study which included 1447 medical students from 5 areas. The study was conducted in the period from 13<sup>th</sup> August to 28<sup>th</sup> August by using SPIN structured questionnaire.

### **Ouestionnaire**

The Social Phobia Inventory (SPIN) questionnaire was used to evaluate the social anxiety disorder, the questionnaire involved 17 questions, and answers of each question ranged from 0 to 4 points. The total score is calculated to investigate the severity of the disease; less than 20 points means no disease, 21-30 means mild, 31-40 means moderate, 41-50 means severe and 51 or more means very severe.

## Statistical analysis

Data were analyzed using SPSS software version 16, simple descriptive analysis in the form of means and standard deviations were calculated for numerical data. Qualitative data were described using numbers and percent distribution and chi square was used as a test of significance to detect association between social phobia and variables, with a significant level of less than 0.05.

#### Ethical issues

The study was done after approval of ethical board of Qassim university.

### RESULTS

The present study included 1447 individuals, the large majority of them were female 893 (61.7%) while males were 554 (38.3%). The study included 5 areas, northern 199(13.7%), southern 277(19.2%), eastern 279 (19.3%), western 283 (19.6%) and central area 409 (28.3%). Most of students were from year 7 (25.4%), followed by those from year 5 and 6; each represented 15.4 %, then year 4 (14.8%), and year 3 (14%) and finally year 2 and 1 which represented 9.8% and 5.2% respectively.

The Social Phobia Inventory (SPIN) was used to evaluate the social phobia between participants, the prevalence of social phobia in this study ranged from mild to severe, there were 7.9% didn't suffer social phobia, while 29% and 24.3% had mild and moderate social phobia respectively, severe and very severe social phobia represented 19.1% and 19.8% respectively, figure 1.

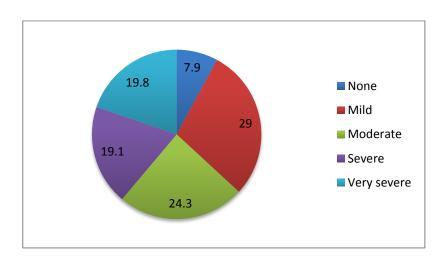


Fig1: Prevalence of phobia and its grade among study group

The mean SPIN score of this study was  $37.95\pm14.17$  and ranged from 17 to 81. The comparison of social phobia grades is shown in table 1.

Table1: comparison of social phobia grades regarding different variables

Variables		None N	Mild N	Moderate N	Severe N	Very severe N	P value
		(%)	(%)	(%)	(%)	(%)	
Gender	Male	40	158	141	110	105	0.808
		7.2%	28.5%	25.5%	19.9%	19.0%	
	Female	74 8.3%	261 29.2%	211 23.6%	166 18.6%	181 20.3%	
District  GPA (out of5)	Northen	18	52	52	47	29	0.356
	Northen	9.1%	26.3%	26.3%	23.7%	14.6%	0.550
	Southern	16	84	68	60	49	
	Southern	5.8%	30.3%	24.5%	21.7%	17.7%	
	Eastern	19	85	65	51	59	
	Lastern	6.8%	30.5%	23.3%	18.3%	21.1%	
	Western	25	75	64	49	70	_
	,,, 0,500111	8.8%	26.5%	22.6%	17.3%	24.7%	
	Central	36	122	103	69	79	
		8.8%	29.8%	25.2%	16.9%	19.3%	
			54	34	38		
			30.7%	19.3%	21.6%	38	
	2-3	12				21.6%	
		6.8%					
	3-4	38	138	143	100	110	0.368
		7.2%	26.1%	27.0%	18.9%	20.8%	
	>4	64	225	175	136	138	
	1.0	8.7%	30.5%	23.7%	18.4%	18.7%	
Year	1-2	10	72	52	40	43	0.004*
	2.4	4.6%	33.2%	24%	18.4%	19.8%	
	3-4	22	119	96	97	_	
		5.3%	28.6%	23.1%	23.3%	19.7%	
	5-6	39	136	120	76	75	
	7	8.7%	30.5%	26.9%	17%	16.8%	
	7	43	92	84	63	86	
		11.7%	25%	22.8%	17.1%	23.4%	

\*P-value; significant

The female expressed both very severe (20.3%) and no disease (8.3%) more than the male did, where there were 19% of males expressed the disease and 7.2% didn't have the disease, however there was no significant difference between the two genders value=0.8) regarding different grades of phobia. Also there was no significant difference (Pvalue=0.3) between students from different areas and different social phobia grades, no significant correlation (P-value=0.3) between students of different grades (GPA) and social phobia grades was found. Regarding different medical year, was significant difference a value=0.004) between different medical years and different social phobia grades, where the percent of medical students with no phobia increased significantly with increasing medical year.

## **DISCUSSION**

The present study included 1447 medical students, most of them (61.7%) were females. The more dominant students in this study were from year 7 (25.4%). The present study revealed that the most common degree of social phobia was mild representing 29% of participants. In a study from King Khalid University Medical Students, the prevalence of social phobia symptoms was 60% [4].

In a study from Malaysia on medical students, it was found that social phobia symptoms were

prevalent in 56% of medical students [14]. Also high prevalence (85%) was reported in Prague, Czech Republic by Raboch in medical students [15], however lower prevalence of social phobia symptoms was reported between medical students in Norway to be 22% [16]. In an Iranian study, the prevalence of social phobia including three grades (moderate, sever and very sever) between medical students was found to be 58.5% [2]. The lowest percent of prevalence was reported in English medical students as 8% [18].

This difference in prevalence of social phobia between medical students may be attributed to the use of different tools for evaluating prevalence of social phobia as well as the differences in culture and socio-demographics between different communities. By studying the correlation between different grades of social phobia and other variables in this study, it was found that there was no significant difference between male and female regarding different social phobia grades (P-value=0.8), however higher percents of female (20.3% and 29.2%) suffered very sever and mild social phobia respectively than males.

A study by Alkhathami et al. [19] showed that males had higher social phobia scores than females, while it was found in western world that social phobia was more common among females [20]. In a Saudi study [4] it was reported that males had higher score for social phobia than females. In an Iranian study [2], the average score of social phobia in males was higher than in females but there was no significant difference between the two genders. Also there were several studies [21], demonstrated that there was no significant difference between male and female regarding social phobia and its grades. Regarding different areas where students came from, there was no significant difference in suffering different levels of social phobia (P-value=0.3).

In the current study, different GPA didn't affected by different social phobia grades (P-value=0.3), while in a Saudi study [4] it was demonstrated that medical students with high scores for social phobia tend to show lower academic achievements. In agreement with our findings, **Mazhari** didn't find correlation between academic performance and social phobia [22]. In the present study, regarding the medical year of students there was a significant difference between different social phobia levels (P-value=0.004), where more students in year 3-4 and 5-6 suffered different social phobia levels than those in year 1-2 and year 7. The total

numbers of students who suffered social phobia were 207 students for those in years 1-2, 394 for those in years 3-4, 407 and 325 for those in years 5-6 and 7 respectively.

### **CONCLUSION**

The most common degree of social phobia among medical students was mild degree, female had mild and very sever social phobia than males, however there was no significant difference between male and female regarding suffering social phobia. Also the academic performance of students didn't affected by different grades of social phobia.

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